

AMENDED PAGES
OF
NEW CLAIMS

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18. A component for producing polymer mixtures, form
thermoplasticized starch and a hydrophobic polymer, comprising
organosilicates with a homogeneous structure consisting
of saponified polyvinyl acetate and alkali silicate solution;
reaction products prepared in situ; and
residues of a catalyst employed during the producing.

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19. A process for producing a component consisting of
polyvinyl acetate and alkali silicate, comprising
intensive thorough mixing and shearing, for producing
polymer mixtures from thermoplasticized starch and hydrophobic
polymer polyvinyl acetate;
hydrolyzing and saponifying the polyvinyl acetate in the
presence of a catalyst, with continuously adding of basically
reacting compounds and of the alkali silicate.

20. The process according to claim 19, comprising
presaponifying the polyvinyl acetate with basically
reacting compounds up to a degree of hydrolysis of 10% to 40%; and
subsequently finally saponifying to a degree of
hydrolysis of between 50% and 100%.

21. The process according to claim 19, comprising
building up a slightly alkaline organosilicate with a pH
of about 7 to 8.5 from a starting polyvinyl acetate and water

glass, with a pH of 9 to 10.

22. The process according to claim 19, comprising adding a hydroxide together with the alkaline water glass or adding a hydroxide before the alkaline water glass is added.

23. The process according to claim 22, comprising adding calcium hydroxide to the polyvinyl acetate until a degree of saponification of between 10% and 40%, has been reached.

24. The process according to claim 19, wherein the catalyst is a low-molecular hydroxy compound selected from the group consisting of a low-molecular alcohol, methanol, ethanol, a polyhydroxyl compound, ethylene glycol, diethylene glycol, triethylene glycol, glycerol, and mixtures thereof.

Sub B2 25. The process according to claim 19, wherein the total amount of the catalyst compounds added does not exceed an amount of 0.5% to 20%, by weight based on the weight of the polyvinyl acetate.

26. The process according to claim 25, comprising providing a batch process; in the batch process, loading the polyvinyl acetate first

in the form of an aqueous suspension, and heating to the reaction temperature of 100°C to 160°C;

metering the basically reacting compound in continuously for presaponification; and metering the alkaline water glass solution in at reaction temperature after the desired degree of saponification has been reached,

27. The process according to claim 19,

wherein the mixing ratio of polyvinyl acetate to alkali silicate expressed in weight proportions of the solid material is in the range of 50:50 to 80:80.

28. The process according to claim 19, comprising

using sodium disilicate and a hydroxide at least partially instead of the alkali silicate solution.

29. The process according to claim 19, comprising

adding one or a plurality of polyfunctional silanes to the reaction batch or to the component.

30. The process according to claim 29,

wherein the silane weight proportion amounts to 3% to 15% of the amount of silane introduced with the alkali silicate solution.

31. The process according to claim 19, comprising

adding native starch to the reaction batch or to the component.

32. The process according to claim 31, comprising adding 5% to 15% by weight of native starch based on the weight of the polyvinyl acetate.

33. The process according to claim 31, comprising adding vinyl acetate together with the starch.

34. The process according to claim 33, comprising adding 0.5% to 1.5% by weight of vinyl acetate based on the weight of the polyvinyl acetate.